

Our Ref:



an agency of the  
Department of Arts and Culture

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CaseID: 11363

Date: Wednesday November 14, 2018  
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## Final Comment

**In terms of Section 38(4), 38(8) of the National Heritage Resources Act (Act 25 of 1999)**

Attention: Mr David Tunnicliff  
Eskom Holdings SOC Ltd

**Proposed 400kV transmission power line, stretching between the Mahikeng area (North West Province) in South Africa and Gaborone in Botswana. The line will connect the existing Isang substation in Botswana to the proposed Watershed B substation in South Africa.**

Aurecon South Africa (Pty) has been appointed by the Southern African Power Pool (SAPP) to conduct an Environmental Impact Assessment (EIA) process for the proposed Botswana-South Africa (BOSA) Transmission Interconnection Project, North West Province. A draft Scoping Report has been submitted in terms of the National Environmental Management Act, Act No 107 of 1998 (NEMA) and the NEMA EIA 2014 Regulations. It must be noted that this project crosses the border of South Africa to Botswana. The comments issued by SAHRA apply only to the section of the project within the borders of South Africa.

The proposed development will include the construction of approximately 560 km 400kV transmission line connecting the Isang 400kV substation in Botswana to a proposed new Watershed B 400/132 kV substation in the North West Province, South Africa and further connecting the proposed Watershed B substation to the Mookoodi and Pluto 400kV substations in the North West Province, South Africa. A total of five (5) alternative routes are being considered. Option C is the preferred route. Three routes are being considered for the Watershed B-Isang Route, Option 2 is the preferred option. Three alternative locations are being considered for Watershed B Substation, Option C is the least preferred option.

G & A Heritage: Heritage Management Consultants were appointed to conduct the Heritage Pre-Scoping Report.

*Gaigher, S. 2016. Heritage Pre-Scoping Report for the First Phase of Investigation into the Heritage Sensitivity of the proposed BOSA Power Line Alignment.*

Several types of heritage resources have been identified to be located within and around the proposed powerline routes. These include Palaeo-Anthropological sites, Stone Age and Iron Age sites, Rock Art sites, battlefields, cemeteries, historic farmlands, historic rural towns, historic institutions, and scenic routes.



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Recommendations provided include that the final alignment of the Watershed B to BOSA connecting lines be subjected to a Heritage Walk-down to ensure that it will not impact on historic battle sites associated with the Siege of Mafikeng. It is also recommended that a Heritage Impact Assessment (HIA) be conducted that will include desktop data collection, field surveys, oral interviews and public consultation.

In an Interim Comment issued on 10/08/2017, SAHRA stated that an HIA must be conducted for the section of the proposed development located in South Africa. The HIA must assess all heritage resources as defined in section 3(3) of the National Heritage Resources Act, Act 25 of 1999 (NHRA) and the HIA must comply with section 38(3) of the NHRA. The Visual Impact of the proposed development on heritage resources and any comments provided by the public regarding heritage resources must be taken into account during the HIA. The HIA must be submitted to SAHRA during the Public Review period as per the NEMA EIA 2014 Regulations.

*Gaigher, S. 2017. Phase 1 Heritage Impact Assessment Report for the Proposed Botswana South Africa (BOSA) Transmission Project.*

It is noted that the entire transmission line was not surveyed and service delivery protests made it difficult to access the development area.

The proposed line is located in areas of very high to low palaeontological sensitivity. It must be noted that Fig. 29 and 30 do not show the proposed line over the palaeontological sensitivity map.

Heritage resources such as Middle Stone Age (MSA) and Later Stone Age (LSA) artefacts were identified along the proposed route. Possible high risk areas for Stone Age sites were noted in Fig. 41 of the HIA. Surface scatters of Iron Age potsherds were identified along the proposed route. The area is known to consist of Early Iron Age sites, as well as Later Iron Age sites (LIA). Through Lidar and aerial photographs, no such sites could be identified within the proposed corridor. Smaller Early Iron Age sites may be evident within the proposed route, as the Lidar or aerial photographs would not provide clear images of these smaller sites. Possible sensitive areas for Iron Age sites are noted in Fig. 45.

Several heritage resources were identified from historical maps, such as cemeteries, graves and ruins. All sites identified from the historical maps are located well outside the development footprint. Several villages and farmsteads were identified within the proposed route. As is the practice, burials can occur within the confines of these settlements. The documentation of these burial grounds will form part of the social impact assessment.



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The impact assessment showed that the impacts to the palaeontological resources, Stone Age sites, Iron Age sites, Built Environment and burial sites will be medium negative pre-mitigation and low negative post mitigation.

Recommendations provided in the report include the following:

- The final pylon placements should be subjected to a walk-down survey to verify that no sites will be affected;
- It is recommended that the development designs consider the positive and negative characteristics of the existing cultural landscape type and that they endeavor to promote the positive aspects while at the same time mitigating the negative aspects;
- A Chance Finds Procedure is recommended.

The Appendix 9: Heritage Management Plan (HMP) of the Environmental Management Programme (EMPr), and the recommendations contained therein are noted.

In an Interim Comment issued on the 19/02/2018, SAHRA requested that a desktop palaeontological must be conducted by a qualified palaeontologist for the proposed project. The desktop study must comply with the 2012 Minimum Standards: Palaeontological Component for Heritage Impact Assessments.

After the Interim Comment was issued, the applicant responded in a letter dated 3 April 2018, to note that a Palaeontological Study had been commissioned and was in progress. After this, SAHRA received a notification on the 13/08/2018 that the Environmental Authorisation (EA) had been granted on the 04/07/2018, as well as the completed desktop Palaeontological Impact Assessment.

SAHRA submitted an appeal to this affect stating that the EA had been granted without complying SAHRAs Interim Comment dated 19/02/2018. The Acting Minister of Environmental Affairs upheld the appeal and set aside the EA noting that “the decision of the Department to grant the aforesaid EA to be procedurally flawed and ought to be set aside, hence the appeal by the appellant is upheld and the decision of the Department to grant the aforementioned EA is set aside.”

In addition to the decision of the appeal, the Acting Minister requested that SAHRA submit its comments on the submitted desktop PIA within 14 working days from the date of signature thereof. “The applicant must thereafter incorporate the said comments into the FEIAT to be submitted to the Department for reconsideration



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prior to making its decision on the application...” The 14 working days ended on the 31 October 2018, however, SAHRA only received notification of the decision on the appeal on the 31 October 2018, and it was not possible to provide comments by that day.

**SAHRA hereby requests condonation to provide comments after the timeframes stipulated in section 4.12 of the decision of the appeal.**

The submitted desktop PIA was conducted by Natura Viva cc.

*Almond, J. E. 2018. Palaeontological heritage specialist assessment desktop study: proposed Botswana-South Africa (BOSA) Transmission Interconnection Project: South African Sector, North West Province.*

The transmission line crosses a wide range of geological units including

Precambrian igneous basement rocks (e.g. Ventersdorp Supergroup lavas, Gaborone Complex granites), younger Precambrian sediments and lavas of the Transvaal Supergroup that mainly crop out along the Southern and Northern Bankenveld regions along the margins of the western Transvaal Basin, as well as Cenozoic superficial sediments of the Kalahari Group. Known occurrences of important Precambrian stromatolites are located within the Chuniespoort and Pretoria Groups of the Transvaal Supergroup including the Mafikeng area. Cenozoic vertebrate fossil assemblages may be associated with the older alluvium, pans, springs as well as karstified limestone or dolomite.

Generally, the BOSA lines is of low palaeontological sensitivity with the exception of several sectors of the line underlain by carbonate bedrocks of the Transvaal Supergroup or by consolidated superficial deposits. These may contain scientifically important occurrences of fossils, such as stromatolites or mammalian remains, that may be threatened by surface clearance or excavations during the construction phase of the transmission line. These sectors are assigned a medium to high palaeosensitivity.

Recommendations provided in the report include the following:

- As a precautionary measure, it is therefore recommended that once the powerline footprint is finalised, and before construction commences, a specialist palaeontological walk-down of the BOSA transmission line corridor should be conducted by a suitably qualified palaeontologist. The focus of the

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walk-down would be on potentially-fossiliferous Precambrian carbonate bedrocks, karstified areas, thick calcretes, tufa deposits and ancient, consolidated or semi-consolidated alluvium along major drainage lines;

- Following the walk-down the specialist should submit a full report to SAHRA documenting any fossil occurrences and making recommendations for further mitigation or monitoring measures for the pre-construction or construction phases of the transmission line;
- The palaeontologist concerned with mitigation work will need a valid collection permit from SAHRA. All work would have to conform to international best practice for palaeontological fieldwork and the study (e.g. data recording fossil collection and curation, final report) should adhere to the minimum standards for Phase 2 palaeontological studies published by SAHRA (2013);
- A Chance Finds Procedure has been provided that must be implemented by the Environmental Control Officer.

## Final Comment

In response to the Acting Minister of the Department of Environmental Affairs request in the decision of the aforementioned appeal (Ref: LSA 175639) section 4.12, the SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit provides the following comments on the submitted desktop PIA:

- The report and recommendations of the palaeontological specialist are supported;
- The recommended walk-down report must be compiled by a qualified palaeontologist and the report must be submitted to SAHRA prior to the construction phase for comment. No construction work may commence without further comments from SAHRA in this regard;
- Prior to the commencement of the walk-down, the appointed palaeontologist must apply for a collection permit in terms of section 35 of the National Heritage Resources Act, Act 25 of 1999 (NHRA);
- Only once a collection permit has been issued to the appointed palaeontologist, may the walk-down commence.

In addition to the conditions provided above, the SAHRA APM Unit accepts the report and recommendations of the submitted HIA and the following additional conditions are provided:

- The recommended walk-down must be conducted by a qualified archaeologist and must be conducted prior to the construction phase. The walk-down report must be compiled by a qualified archaeologist and must be submitted to SAHRA prior to the construction phase for comment. No construction work

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may commence without further comments from SAHRA in this regard;

- The recommendations pertaining to heritage contained within the EMPr and HMP are accepted pertaining to the South African section of the line;
- A 30 m no-go buffer must be adhered to around all identified community cemeteries;
- All monitoring reports noted in Table 2 of the HMP must be submitted to SAHRA for record purposes;
- The cultural heritage training programme should be submitted to SAHRA to ensure compliance with the NHRA and SAHRA policies and guidelines;
- If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Natasha Higgitt/Phillip Hine 021 462 5402) must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Thingahangwi Tshivhase/Mimi Seetelo 012 320 8490), must be alerted immediately. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;
- The decision regarding the EA Application must be communicated to SAHRA and uploaded to the SAHRIS Case application.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

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Natasha Higgitt  
Heritage Officer  
South African Heritage Resources Agency

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Phillip Hine  
Acting Manager: Archaeology, Palaeontology and Meteorites Unit  
South African Heritage Resources Agency

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**ADMIN:**

Direct URL to case: <http://www.sahra.org.za/node/405813>  
(DEA, Ref: )

**Terms & Conditions:**

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.